

REMARKS

By this amendment, claim 1 and 7 are revised to place this application in condition for allowance. Currently, claims 1, 3-5, 7, 10, 11, and 14-19 are before the Examiner for consideration on their merits.

First, the revision to claims 1 and 7 is made to provide consistency between this application and its European counterpart. It should also be noted that the European Examiner requested that the change from “commercial” to “low odor” be made and that low odor is disclosed on page 2, line 3 of the application.

Further, the change to low odor does not raise a new issue that mandates filing of an RCE by Applicant. The arguments set out below clearly demonstrate that the rejection is not valid and that the claims are patentable over the cited prior art. Therefore, this Amendment should be entered and the application passed onto issuance.

Turning to the prior art rejection, the Examiner rejects all claims under 35 U.S.C. § 103(a) based on the combination of United States Patent No. 3,795,556 to Sippel et al. (Sippel) when modified by United States Patent No. 2,771,458 to Van Gilder et al. (Van Gilder), an article entitled “Commercial Kerosene”, November 1998 (CK), and an article entitled “Intrinsic Viscosity of Polymer Solutions” by Ram et al. (Ram).

In review, claim 1 calls for mixing a liquid hydrocarbon with an essentially paraffin polyolefin polymer in solid form to yield a thickened homogenous solution, characterized in that the liquid hydrocarbon comprises low odor kerosene having a

flashpoint greater than or equal to 62 °C and the polymer has a molecular weight in the range of  $1.4 \times 10^6$  to  $2.0 \times 10^6$ . Claim 7 is similar except that it defines the invention in terms of a method.

In making the rejection, the Examiner alleges that Sippel teaches mixing a liquid hydrocarbon (kerosene as JP-4 or JP-5) with an essentially paraffin polyolefin polymer in solid form (paraffin) but does not disclose the properties of the kerosene or polymer. The Examiner alleges that kerosene with the claimed property and paraffin with the claimed property are known in the art as evidenced by the secondary references. The Examiner also concludes that the use of the commercial kerosene and paraffin of the secondary references in the composition and method of Sippel would be obvious to one of ordinary skill in the art.

Applicant traverses the rejection on a number of grounds. The principal reason is that the Examiner is drawing a conclusion of obviousness without the required reasoning to modify Sippel.

First, it is admitted that Sippel's kerosene is not the same as that claimed. The JP-4 or JP-5 are not the same as that claimed since these grades include not only aliphatic hydrocarbons but also aromatics and polycyclics.

Second, the Examiner's reliance on Ram to show that the claimed kerosene is known is incorrect. The "technical kerosene" taught by Ram is entirely different from a low odor kerosene as claimed. The kerosene of Ram is similar to Sippel in that it includes not only aliphatic hydrocarbons but also aromatics and polycyclics. The kerosene used as part of the invention comprises mainly aliphatic hydrocarbons

and the flashpoint limitation of a minimum of 62 °C is not taught or suggested in either Sippel or Ram.

In essence, the Examiner is taking the following positions:

- 1) kerosenes are known that would have the claimed flashpoint;
- 2) polymers are known that would have the claimed molecular weight;
- 3) "the use of any kerosene and polyisobutylene is obvious to the skilled artisan", see top of page 4 of the Detailed Action; and
- 4) therefore, it would be obvious to use the known kerosene and polyisobutylene that match the claimed properties in place of the kerosene and paraffin of Sippel and such a modification produces the invention.

One error committed in this approach relates to item #3. The assertion that any kerosene and any polymer is available to modify Sippel is erroneous since it ignores that fact that the product of Sippel has an intended purpose, just as does the invention. In Sippel, the purpose is to provide an improved incendiary composition and method of preparation. In doing so, Sippel teaches that a particular liquid hydrocarbon, i.e., a specially-refined kerosene with a particular flashpoint, see col. 2, lines 23-25, is required to meet the aim of Sippel. Given Sippel's aim, it is error for the Examiner to conclude that any kerosene and polymer are candidates for substitution for Sippel's materials. The substitution must be taken in the context of Sippel itself.

Sippel is not teaching merely the thickening of kerosene using a particular polymer. If this were the case, it could be argued by the Examiner that the

particular type of kerosene to be thickened could be any type. However, this is not the case here. Sippel is specifically targeted to improve incendiary compositions and teaches a particular kind of kerosene. Therefore, it is error for the Examiner to make the statement that it is obvious to use any kerosene in Sippel and this alone taints the rejection and requires its withdrawal.

Turning back to the invention, Applicant is not claiming a mixture of any type of kerosene or any type of polyisobutylene in combination. Rather, the type of kerosene and polymer are specifically defined in the context of the invention, which relates to domestic barbequing and safety in doing so.

The particular kerosene and polymer of claims 1 and 7 are not found in Sippel or Ram. In fact, the invention and Sippel are entirely different as set forth in the response filed on June 18, 2009. That is, Sippel is for an entirely different purpose, namely a self igniting offensive weapon composition, whereas the present invention requires safe use with properties useful for a domestic barbecue environment.

Again, Applicants submit that the Examiner does not have the required and articulated reasoning to select a kerosene composition and a polymer composition for a specific purpose that is not disclosed in the prior art and use them in substitution for the kerosene and polymer of Sippel merely because the compositions may exist.

The Examiner's observation that a compound and its properties are inseparable is noted. However, this tenet does not relate to the issue at hand.

Applicants are not arguing that that they are the first to invent a kerosene with the claimed flashpoint or a polyisobutylene with the claimed molecular weight. The real issue here is whether it is obvious to modify Sippel by altering the kerosene and polymer with ones that match the claim limitations. The fact that a kerosene and/or polymer may exist that has the claimed properties does not end the inquiry. The inquiry is whether such can be used in substitution for those of Sippel. The answer to the inquiry is that there is no reason to do so since the prior art does not provide any guidance as to why one of skill in the art would make such a modification of Sippel. Certainly, the prior art does not teach that the claimed kerosene and claimed polymer are useful in the context of a firelighter fluid. Lacking the reasoning for modifying Sippel means that the rejection is not valid and must be withdrawn.

For the rejection of claim 3 and the requirement of a certain amount of kerosene and polymer, the Examiner turns to the Van Gilder reference to allege that it would be obvious to modify the amounts used in Sippel. Here, the Examiner asserts that Van Gilder discloses compositions which have various uses including waterproofing materials, coating compositions and “the like”. It is presumed that “the like” means that Van Gilder also encompasses barbecue lighting fluid. Again, the Examiner draws a conclusion that is not supported by a factual basis. The mere fact that Van Gilder uses the term “and the like” does not mean that barbecue lighting fluid is included in this grouping. Barbeque lighting fluids are not in the

least like waterproofing materials or coating compositions and the Examiner has committed error in interpreting Van Gilder in this regard.

The Examiner's reference to an intended use as grounds for the rejection is misplaced. Claim 3 is a method claim that relates to mixing do that the reliance on this principle is not relevant to the inquiry.

The Examiner's notation that the use of 1% of a polymer and the remaining balance as kerosene in Van Gilder as a range that could be used in Sippel such that a *prima facie* case of obviousness is alleged to be present is also based on incorrect reasoning. As argued above, the mere fact that Gilder may teach an amount of polymer and kerosene that could overlap that specified in claim 3 does not mean that Sippel can be modified such that claim 3 is obvious. Since Sippel is concerned with incendiary devices with a particular formula to be followed, why employ the teachings of Van Gilder, which does not relate to an incendiary device and modify Sippel. The Examiner is making a modification of Sippel without the proper reasoning and this means that the rejection of claim 3 is improper and must be withdrawn. The same reasoning applied to claim 15.

Moreover, the invention of claims 1, 3, 7, and 15 is more than the mere juggling of the percentages of kerosene and polymer. A composition within the requirements of the present claims is not only not shown in the prior art, i.e., a *prima facie* case of obviousness does not exist, but is remarkably effective in providing a barbecue lighting fluid where the burn time is extended, thus rendering the fluid effective for lighting even hard, solid briquettes commonly used as

barbeque fuel without the risk of needing to add further lighting fluid because the initial fluid has become expended. This is a clear technical advantage over previously-known barbeque fluid and it is strongly argued that the invention cannot be considered to be obvious from the prior art.

The Examiner also commits error in asserting that the advantages of the invention naturally follow from the suggestion of the prior art. This argument is completely false and illogical. Turning to Van Gilder again, the problem addressed by this prior art is to obtain the maximum polymer content consistent with a viscosity which will permit satisfactory use of the solution for many purposes such as adhesives, impregnating materials, dipping or spreading cements, binders when mixed with wood, flour, cork, etc., and as waterproofing materials, coating compositions and the like. Therefore, to follow the teachings of the prior art would be to seek a maximum proportion of the thickened fluid with viscosity requirements and it is pointed out that there would be no perceived advantage in following these teachings for a barbeque lighting fluid. To maximize the thickener would be to minimize the hydrocarbon content and this would result in a thickened fluid which would simply not have the necessary flammability requirements.

Again, why would one of skill in the art look to modify Sippel using the teachings of Van Gilder when they are in such totally different technical fields, the common factor coincidentally being only kerosene? It is again submitted that the prior art has absolutely nothing to say to the artisan regarding the provision of a

barbeque lighting fluid and that, as a result, the invention is not obvious under 35 U.S.C. § 103(a).

Even if it were obvious to employ a low odor kerosene for a barbeque lighting fluid, e.g., to avoid unpleasant smells, it is still not obvious to thicken it as the claim requires from the teachings of the prior art.

To summarize, the invention as now claimed is therefore submitted as being not only novel but also unobvious over the combination of applied prior art. Since claims 1, 3, 7, and 15 are considered to be patentable over the applied prior art, the remaining dependent claims are also in condition for allowance.

Accordingly, the Examiner is requested to examine this application and pass all pending claims onto issuance.

If the Examiner believes that an interview would be helpful in expediting the allowance of this application, the Examiner is requested to telephone the undersigned at 202-835-1753.

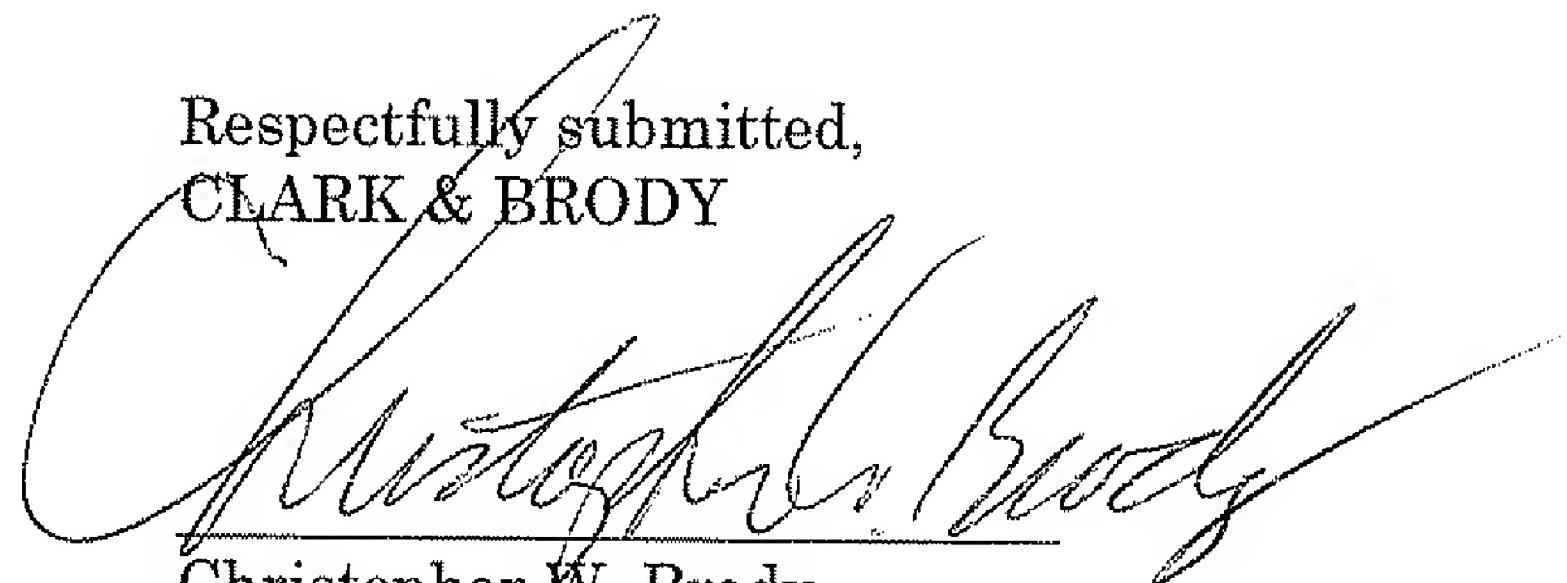
The above constitutes a complete response to all issues raised in the Office Action dated November 5, 2009.

Again, reconsideration and allowance of this application is respectfully requested.

Applicants respectfully submit that there is no fee required for this submission.

Please charge any fee deficiency or credit any overpayment to Deposit  
Account No. 50-1088.

Respectfully submitted,  
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